



AAR-100

Human Factors Newsletter # 00-21

(November 25, 2000 – December 8, 2000)

ATC Simulation: Human factors researchers at the William J. Hughes Technical Center are working to foster development of the Distributed Environment for Simulation, Rapid Engineering, and Experimentation (DESIRE) as the ATC simulation test bed of the future. Progress is being made in terms of augmenting this capability so that it can be used for both concept and acquisition support research. (E. Stein, WJHTC)

Electronic Flight Bag (EFB): A researcher from Volpe NTS attended a meeting of the Air Transport Association Digital Data Working Group in Washington, DC on 5-6 December. She obtained industry feedback on the recently released document on human factors considerations for EFBs and presented her recent activities towards validation of the guidance in the document against industry prototypes. The document was released as a final report to the FAA sponsor and others on September 28th (Report No. DOT-VNTSC-FAA-00-22). It is intended to facilitate the development of FAA advisory material for the evaluation and operational approval of EFBs. The document is accessible to users and manufacturers for use in system design and development. (T. McCloy, AAR-100; D. Chandra, VNTSC)

Human Factors and Accident Investigation: A representative from CAMI's Human Factors Research Laboratory (AAM-510) presented an invited seminar on Human Factors and Accident Investigation at the Fifth Australian Aviation Psychology Association Conference that was held in Sydney, Australia, in November. This meeting provided an opportunity to further CAMI's worldwide presence, as the meeting was attended heavily by European and Pacific Rim Nations. Additionally, meetings were held with FAA grant recipients from Australia (Dr. Mark Wiggins), New Zealand (Dr. David O'Hare) and the U.S. (Dr. Douglas Wiegmann). (S. Shappell, CAMI)

Selection and Training: Representatives from CAMI's Training and Organizational Research Laboratory (AAM-520) participated in an AT-SAT Validation meeting that was held in Herndon, VA, on November 28-29, to critique potential alternate form questions. They also conferred with representatives from HumRRO, Caliber, and ATC to discuss future AT-SAT requirements. (E. Fiedler, C. Detwiler, CAMI)

ASDE-X: The ASDE-X working group met in the William J. Hughes Technical Center's

Human Factors Laboratory to discuss progress to date. Among other things, they reviewed the test plan for the Early User Involvement Exercise (EUIE) scheduled for February 2001. (E. Stein, WJHTC))

Innovation Award: The Aviation Security Human Factors Program received an Innovation Award from Aviation Week & Space Technology for work in developing Threat Image Projection (TIP). TIP maintains screener vigilance, exposes screeners to a wide range of threats, and monitors performance to enhance operator threat detection. This was the first time that the FAA has received an Innovation Award from Aviation Week and representatives of the program accepted on behalf of the agency in Long Beach, California. (C. George, AAR-1)

Explosives Detection Systems: AAR-510 personnel completed a test and evaluation plan for qualification testing for several ARGUS Explosive Detection Systems. Each ARGUS system will be evaluated with respect to FAA specification documents and human factors requirements. Human factors engineers will use formal testing, informal testing, and visual inspection during this study. (C. George, AAR-1)

Carnahan Conference on Security Technology: Representatives of the Aviation Security Human Factors Program presented multiple papers at the IEEE Carnahan Conference on Security Technology. An entire panel at the Ottawa, Canada, conference was devoted to aviation security and human factors topics. (C. George, AAR-1)

Computer-Based Training (CBT) Field Installations: Representatives of the Aviation Security Human Factors Program traveled to Seattle-Tacoma International Airport (SEA) to install CBT systems for initial screener training. In conjunction with the manufacturers, CBT was installed on computers at the Alaska Airlines screener training room. These three systems will be evaluated during the CBT assessment to be conducted over the next few months. (C. George, AAR-1)

Security Equipment Artistic Expression: Representatives of the Aviation Security Human Factors Program assisted a graduate student in fine arts at New York University with photographic images of X-ray equipment. The master's thesis project is focused on the aesthetics of the equipment and X-ray images. Ultimately, this effort will result in an exhibition in New York City. (C. George, AAR-1)

International Aviation Security Human Factors Technical Advisory Group Meeting: Representatives of the Aviation Security Human Factors Program and the Chief Scientist for Human Factors attended and presented at the tenth biennial meeting of the International Aviation Security Human Factors Technical Advisory Group Meeting (InterTAG). The meeting was co-hosted by Alaska Airlines. The InterTAG is a multinational group dedicated to information exchange and cooperative research to enhance international civil aviation security. Member nations include the United States, United Kingdom, Belgium, Canada, Sweden, Netherlands, and Norway. (C. George, AAR-1)

International Research Collaboration: Representatives of the Aviation Security Human Factors Program and the United Kingdom Defense Evaluation and Research Agency (DERA) met to discuss collaborative human factors research projects. The DERA Centre for

Human Sciences and the FAA Aviation Security Human Factors program intend to collaborate on the next generation of Threat Image Projection (TIP), international human-centered standards for security equipment, and certification of screeners. These efforts will be conducted under the auspices of a Memorandum of Cooperation between the two nations. (C. George, AAR-1)

Mexican Police Visit: Representatives of the Aviation Security Human Factors Program met with approximately 30 members of the Mexican Federal Police to discuss human-centered approaches to improve security screener detection performance. The briefing included a demonstration of Threat Image Projection, new X-ray technologies, and a question and answer session. (C. George, AAR-1)

More information on human factors research can be found at the FAA Human Factors (AAR-100) web site: <http://www.hf.faa.gov>

Mark D. Rodgers
FAA (AAR-100)



January 17, 2001 – ATCA Symposium – “Air 21”, Renaissance Hotel, Wash, D.C.
<http://www.atca.org/>

February 22-23, 2001 – 2001 Aviation Maintenance Training Conference, Toulouse, France
<http://www.avex-online.com/>

February 22-23, 2001 – Human Factors for Aviation Technicians Workshop. Atlanta, GA
<http://www.greyowl.com>

March 13-15, 2001 – The Advanced Technology Electronic Defense Systems Conference and The Tactical Situational Awareness Symposium, Shelter Pointe Hotel and Marina on Shelter Island, San Diego, CA [mail to: AssenmacheTJ@navair.navy.mil](mailto:AssenmacheTJ@navair.navy.mil)

March 18-20, 2001 – National Aviation Environmental Conference, Dallas, TX
<http://www.airportnet.org/>

March 21-23, 2001 – International Symposium on Smart Graphics, Hawthorne, NY
<http://www.smartgraphics.org/>

March 27-29, 2001 - The Fifteenth Symposium on Human Factors in Aviation Maintenance, The Brewery Conference Centre, London, UK [mail to: enquiries@conferenceconsultancy.com](mailto:enquiries@conferenceconsultancy.com)

March 31 – April 5, 2001 - CHI 2001, Seattle, WA <http://www.acm.org/chi2001>

April 3-5, 2001 – Maintenance Repair and Overhaul Conference and Exhibition, Dallas, TX
<http://www.aviationnow.com/>

April 8-14, 2001 – Sun 'n Fun EAA Fly-In, Lakeland, FL <http://www.sun-n-fun.com/>

April 24-26, 2001 – 46th Annual Corporate Aviation Safety Seminar, Orlando, FL
<http://www.nbaa.org/>

April 30-May 2, 2001- Regional Airline Association Convention, Tampa, FL <http://www.raa.org/>

May 3-4, 2001 – Human Factors for Aviation Technicians Workshop, Long Beach, CA
<http://www.greyowl.com>

May 14-17, 2001 – DOD Technical Advisory Group Meeting, Adam's Mark Hotel, Colorado Springs, CO <http://dticam.dtic.mil/hftag/>

June 3-8, 2001- Society for Information Display, International Symposium, Seminar & Exhibition, San Jose Convention Center, San Jose, CA [mail to: pdrzaic@elink.com](mailto:pdrzaic@elink.com)

June 17-24, 2001 – Paris Air Show, Le Bourget, France <http://www.promosalons.com/>

July 8-11, 2001 – ATCA 12th Annual International Technical Conference & Exhibition, Conrad International Hotel, Dublin, Ireland <http://www.atca.org/>

August 5-10, 2001 – 9th International Conference on Human-Computer Interaction, New Orleans, LA <http://hcii2001.engr.wisc.edu/>

September 10-14, 2001 – Aerospace Congress & Exhibition By Aerospace North America and SAE, Washington State Convention and Trade Center, Seattle, WA [mail to:kthomson@sae.org](mailto:kthomson@sae.org)

September 18-20, 2001 – NBAA Annual Meeting and Convention, New Orleans, LA
<http://www.nbaa.org/>

October 8-12, 2001 – Human Factors and Ergonomics Society 45th Annual Meeting, Minneapolis, MN <http://www.hfes.org/>

October 2001- Annual Cabin Safety Research Technical Group Meeting, Taj Mahal Hotel and Casino, Atlantic City, NJ

November, 2001 – DOD Technical Advisory Group Meeting, San Diego, CA
<http://dticam.dtic.mil/hftag/>

November 4-8, 2001 – ATCA 46th Annual International Program & Exhibits, Washington Convention Center, Wash, D.C. <http://atca.org/>

December, 2001 – EUROCONTROL Air Traffic Management R&D Seminar, Santa Fe, New Mexico <http://eurocontrol.fr/>

September 23-27, 2002 – Human Factors and Ergonomics Society 46th Annual Meeting, Pittsburgh, PA <http://www.hfes.org/>

Note: Calendar events in Italics are new since the last Newsletter



Comments or questions regarding this newsletter?
Please contact Bill Berger at (202) 267-8532
or via e-mail at bill.ctr.berger@faa.gov